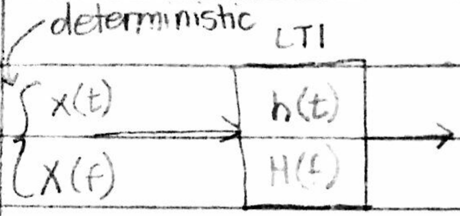
Lecture 10

10/05/15



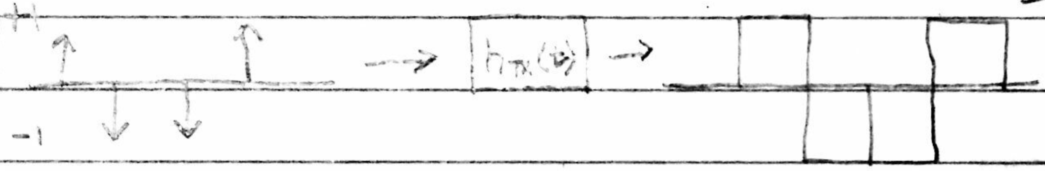
$y(t) = x(t) * h(t)$

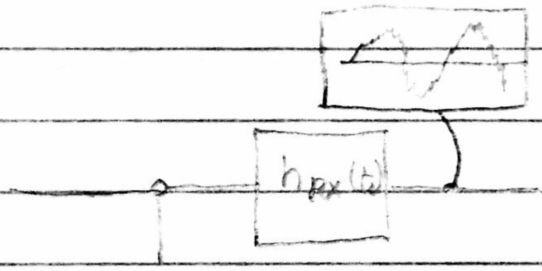
$Y(f) = X(f)H(f)$

random $\{X(t), S_x(f)$ $\quad y(t)$

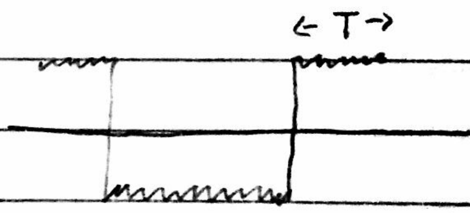
$$S_y(f) = S_x(f)\,|H(f)|^2$$

$\leftarrow \sum a_k h_{Tx}(t-kT)$





$y(T) = y_s + y_N$



$P_n \triangleq \int_{-\infty}^{\infty} S_N(f)\,df$

$\triangleq R_n(0) \triangleq E[n^2(t)]$